

REMARKS

Summary of Office Action

Claims 1-7, 9-16, and 18-29 are pending in this application. Claims 22-27 were withdrawn from consideration pursuant to a restriction requirement.

The Examiner said that applicant's arguments in the May 19, 2008 Reply To Office Action have been considered but are not persuasive.

Accordingly, claims 1-7, 9, and 28 stand finally rejected under 35 U.S.C. § 103(a) as being obvious from Kruck U.S. Patent No. 3,974,832 (hereinafter "Kruck"), and claims 10-16, 18-21, and 29 stand finally rejected under 35 U.S.C. § 103(a) as being obvious from Kruck in view of Sarnoff et al. U.S. Patent No. 4,755,169 (hereinafter "Sarnoff").

Summary of Applicant's Reply

Applicant submits concurrently herewith a Request For Continued Examination under 37 C.F.R. § 1.114.

Applicant has amended claims 1, 10, and 16 to more particularly point out and distinctly claim the subject matter that applicant regards as the invention.

No new matter has been added.

Reconsideration of this application in view of the amendments and following remarks is respectfully requested.

Rejections of Claims 1-7, 9, and 28 Under 35 U.S.C. §103(a)

Claims 1-7, 9, and 28 were rejected under 35 U.S.C. §103(a) as being obvious from Kruck.

These rejections are respectfully traversed.

Independent claim 1 has been amended to require that the wall of the needle-supporting portion be adjoined on its exterior surface by the second hub portion and adjoined on its interior surface directly opposite the adjoined exterior surface in the same direction as a longitudinal axis of the needle by the first hub portion so as to form a contiguous, mutually reinforcing sandwiched structure of the second hub portion, the wall, and the first hub portion that extends around the opening in the wall.

Kruck's hypodermic needle assemblage does not meet this requirement.

As shown in Kruck's FIG. 1, hub shoulder 56 of hollow key member 48 (\approx the first hub portion) contacts internal shoulder 40 (\approx the wall) of ferrule 26 (\approx the cap). However, flange 52 of cup portion 46 (\approx the second hub portion) does not contact ferrule 26 directly opposite internal shoulder 40 of ferrule 26 -- there is a gap between ferrule 26 and flange 52.

Similarly, at upper surface 58 of ferrule 26 where flange 52 contacts ferrule 26, hollow key member 48 does not contact ferrule 26 directly opposite upper surface 58 -- there is empty space on the opposite side of upper surface 58 where flange 52 contacts ferrule 26.

The same holds true for hub shoulder 54, internal shoulder 38, and flange 50 on the left side of Kruck's needle assemblage as shown in FIG. 1.

Thus, there is no area or even a point where Kruck's cup portion 46 (\approx the second hub portion), internal shoulders 38, 40 (\approx the wall), and hollow key member 48 (\approx the first hub portion) adjoin directly opposite each other to form a contiguous, mutually reinforcing sandwiched structure as required by applicant's claim 1.

Furthermore, there is no suggestion in Kruck or reason why a person of ordinary skill would modify Kruck's hypodermic needle assemblage to reinforce internal shoulders 38, 40, because the hypodermic syringe of which Kruck's device is a part is manually operated and thus not subjected to the forces of an automatic injector.

Amended independent claim 1 is therefore not obvious from Kruck and should now be allowable.

For at least these reasons, dependent claims 2-7, 9, and 28, which depend directly or indirectly from independent claim 1, should also be allowable (i.e., dependent claims are allowable if their independent claim is allowable).

Accordingly, applicant respectfully requests that the rejections of claims 1-7, 9, and 28 under 35 U.S.C. § 103(a) be withdrawn.

Rejections of Claims 10-16, 18-21, and 29 Under 35 U.S.C. § 103(a)

Claims 10-16, 18-21, and 29 were rejected under 35 U.S.C. §103(a) as being obvious from the combination of Kruck and Sarnoff.

These rejections are respectfully traversed.

Independent claim 10 has been amended similarly to claim 1 and thus is not obvious from Kruck for the same reasons as claim 1.

Sarnoff was cited because it purportedly discloses a stored energy means that the Examiner contended could be combined with Kruck to provide a means for automatically injecting a medicament into a patient (i.e., by allowing the stored energy means to provide force to Kruck's plunger).

Applicant submits that Sarnoff does not make up for the structural deficiencies of Kruck and further submits that Kruck may not be modifiable into an automatic injector without extensive redesign because “the inner end of the needle 24 ... pierces the sealing membrane 18” (Kruck, col. 4, lines 20-22) as Kruck’s needle assemblage is mounted to syringe barrel 12. That is, sealing membrane 18 is pierced before an injection is initiated. A liquid medicament may thus leak out through the needle as the injector is carried, handled, and positioned prior to an injection operation. Recall that the purpose of automatic injectors is to provide quick administration of a medicament often in emergency situations. Therefore, to delay mounting the needle assemblage until the injector is needed, or to risk some or all of a liquid medicament leaking out through the needle before an injection, is unacceptable for an automatic injector.

In response to applicant’s assertion above that the liquid medicament may leak out prior to an injection operation, the Examiner said that “this is true of the Sarnoff device as well (FIG. 10)” (July 9, 2008 final Office Action, page 6). Applicant disagrees. Liquid medicament ingredient 552 is sealed within inner container member 546 by forward end 560 of plunger 558 on one end and by piston 542 on the other end. Piston 542 is not pierced by needle element 550 until an injection operation is initiated.

Accordingly, the combination of Kruck and Sarnoff is not likely to result in a practical device without significant redesign and, in any case, does not render obvious amended independent claim 10, which should now be allowable.

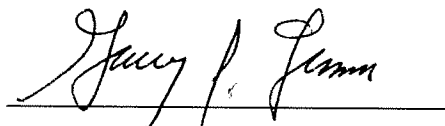
For at least these reasons, dependent claims 11-16, 18-21, and 29, which depend directly or indirectly from independent claim 10, should also be allowable (i.e., dependent claims are allowable if their independent claim is allowable).

Accordingly, applicant respectfully requests that the rejections of claims 10-16, 18-21, and 29 under 35 U.S.C. §103(a) be withdrawn.

Conclusion

The foregoing demonstrates that claims 1-7, 9-16, 18-21, 28, and 29 are allowable. Therefore, subject to the disposition of withdrawn claims 22-27, this application is in condition for allowance. Reconsideration and allowance are accordingly respectfully requested.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Garry J. Tuma", is written over a horizontal line.

Garry J. Tuma
Registration No. 40,210
Attorney for Applicant

JONES DAY
Customer No. 20583
222 East 41st Street
New York, New York 10017
(212) 326-3939